



# NRC NEWS

## U.S. NUCLEAR REGULATORY COMMISSION

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### Remarks by

**Dr. Nils J. Diaz, Chairman**

**United States Nuclear Regulatory Commission**

**at the**

**Joint Meeting of the National Organization of  
Test, Research, and Training Reactors  
and the International Group on Research Reactors  
September 14, 2005**

Thank you, Brian [Brian Thomas, Chief of the NRC Research and Test Reactor Section], for your introduction, and a special thank you to Tawfik Raby and Sy Weiss, Co-Chairs of the Organization of Test, Research, and Training Reactors, for inviting me to chat with you. I am going to state the obvious: I am here because I care about this community in a very special way, and because, as Chairman of the NRC, I have direct responsibility for the regulatory oversight of your facilities. I will try to make the best of these two facts in my remarks in the context of the realities of 2005 and beyond.

The research and test reactor community is an important national asset that makes significant contributions in many arenas to the benefit of the people of our great country. It is important that you continue to do so; in fact, it is important that you fulfill the larger role that I believe is around the corner.

The role that you play, and the larger role that you should play, require that you devote the time, the intellect, and the resources to assure the safe and secure operation of your reactor facilities. It is in the area of safe and secure operations that the NRC's licensing and oversight responsibilities interact with your programs to ensure protection of the public and the common defense and security.

And you have done just that: you have protected public health and safety and national security. NRC-licensed TRTRs have a distinctive and laudable record: no member of the public has been injured from the operation of your facilities, no hazardous release of radioactivity has occurred, and you have secured and accounted for nuclear fuel and materials important to national security. You have done all this for many many years, while serving a unique educational and research role for our country.

Yet, today, you and every American are asked to do more. The events and the consequences of the 9/11 terrorist attacks have changed America, and indeed, the entire world. We are all asked to be more vigilant, to take that extra careful step to prevent malevolent events, and specifically, to ensure that there are no gaps in the safety, security, and emergency preparedness in nuclear reactor facilities and radioactive materials users. More has been asked by our country and more has been given by the NRC and its licensees, including TRTRs. You operate in the midst of close-knit communities, in the heartland of America, because you can and you should. The visibility of research and test reactors, and the need to educate, place special demands on your efforts, acknowledging the established facts of low inventory of radioactivity at your reactors and the systems and barriers designed to prevent accidents and minimize potential radioactivity dispersal.

The TRTR community must discharge its responsibilities and establish its “value-added” within the regulatory framework of the NRC, based on the realities of a demanding, yet forgiving, nuclear technology. This is a technology that is always in the public spotlight. You must discharge your responsibilities in an unforgiving environment for nuclear or radiological events, no matter how small the consequences. Someone asked me the other day to place the risks and benefits of TRTRs in perspective. Easy. TRTR facilities, operated within the framework of safety, security, and emergency preparedness that you are required to implement, are safe and have minimal risks for affecting public health and safety. This is true for all types of credible events considered, malevolent or not, regardless of the cause. Furthermore, the risk of diversion of nuclear material with national security implications is low, and getting lower.

On the beneficial side, you bring value to our country in your educational, training, research and service activities. I personally expect that you will continue to do so, even more so as the Nation asks you, the industry, and the NRC to prepare for and fulfill new and growing expectations for energy security, including nuclear power, and as we continue to ensure national security.

Before I discuss future directions for the TRTR community, I need to repeat and emphasize key facts on security. The NRC and the research and test reactor community have worked closely to further improve security in recent years. We must continue to do so. These security improvements have appropriately considered that research and test reactors pose low risks of radiological exposure to the public. Furthermore, within our presently existing national security programs, the risk from the theft of radioactive materials from TRTRs is also low. This does not mean that the NRC and the TRTRs take safety and security for granted; on the contrary, it means that we take it very seriously and will continue to do so.

Enhanced nuclear safety, security, and emergency preparedness are cornerstones for the protection of the people of America from radiological hazards. We have taken all three to new levels of performance. As we go forward, the NRC will continue to be vigilant, cognizant of the threat and of the need to ensure that every one of our licensees is performing at the level needed to protect the public.

With regard to research and test reactors, in response to the terrorist attacks of September 11, 2001, a number of Commission-directed security initiatives were begun. Compensatory security

measures were developed and licensee plans for implementing these measures were reviewed and approved. Field assessments were made at most reactors to confirm the effective implementation of the compensatory security measures. The Commission also directed the NRC staff to perform additional safety and security assessments of research and test reactor licensees. Significant NRC resources were directed at completing the security assessments and security-related inspections. Licensees also devoted significant resources to enhance safety, security, and preparedness.

I mentioned a larger role ahead for your communities. The prospect of licensing and constructing new nuclear power plants is squarely in front of us. The President's agenda, as well as the recently enacted Energy Bill, encourage new nuclear power plant licensing and construction. To facilitate this objective, the Energy Bill also contains several provisions that are intended to enhance science and engineering education, including NRC scholarship and fellowship programs for fields that are critical to the NRC's mission, and authorization to provide financial assistance to institutions of higher education to promote the development of academic offerings in subject areas that relate to NRC's mission. The Department of Energy was also directed to undertake similar initiatives to improve the state of science and technology education and training for the Nation's energy workforce. You must play a key role in this endeavor.

The NRC is prepared to objectively review new reactor applications, conduct new reactor construction inspections, and implement effective oversight of any new reactors. In fact, we are currently working on early site permits, a design certification, and a number of pre-application reviews. Strong rumblings about applications for combined licenses (or COLs) are being made. As I am sure you know, there will need to be a good deal of preparation on the part of applicants, utilities, and the NRC to support and oversee new reactor licensing and construction activities.

All this creates an urgent need to train new nuclear professionals. The NRC will substantially increase its recruiting efforts to hire approximately 350 new entry-level and experienced employees by the end of next year. You heard right: 350. That amounts to more than 10% of the agency's current staffing level. In one year, no less. We need to do this to offset expected retirements and to increase staffing levels in anticipation of potential new reactor license applications in 2007 and 2008. We have worked hard over the years to make the NRC an attractive place to work. The American University has identified the NRC as one of the 10 best Federal agencies to work for based on the results of the Office of Personnel Management's 2004 Federal Human Capital Survey. We are well up in the top 10, and there is not a regulatory agency that is ahead of us. Programs such as the Student Career Experience Program, the Nuclear Safety Professional Development Program, and the Graduate Fellowship Program are expected to continue to attract highly qualified and motivated employees to the agency. All that having been said, the Commission, and senior agency management, are well aware that we will have to compete with the regulated industry for qualified people. We will need your facilities to train many of our future employees.

The research facilities and educational institutions supporting TRTRs should play essential roles in technology development and education and training. Key aspects of the safety cases and technical basis for reactor applications will be supported by research and data developed in the research and test reactor community. Students will be trained at research and test reactors. Many of the

engineers, health physics technicians, nuclear physicists, and other nuclear professionals will also be educated and trained at facilities associated with research and test reactors. Many new technologies, including innovative new fuel designs, will be tested at research and test reactors. A commitment to operational safety and the supporting know-how by new professionals is founded in your teaching.

The Commission is now using a terminology that I strongly endorse: the NRC's strategic objective is to enable the use and management of radioactive materials and nuclear fuels for beneficial civilian uses, in a manner that protects public health and safety, the environment, and national security. It could have easily been written for you.

The point is clear: you have your work cut out for you, and we have our work cut out for us. The challenges facing us over the next few years are great, yet they are very "do-able." We need to do them timely and right. Let me stop there, and take your questions.